

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A fin, ~~in-particular corrugated fin, in-particular~~ for a flat tube heat exchanger that is configured to be flowed over by air, in-particular a coolant or charge air cooler for motor vehicles, the fin being arranged between flat tubes of the heat exchanger or ~~being arranged perpendicularly to them~~ perpendicular to the flat tubes of the heat exchanger and ~~being~~ connected to ~~them~~ the flat tubes of the heat exchanger with a cohesive material joint or mechanically, ~~being provided with~~ comprising:

gills including a buckle-proof profile which deviates from a straight line or a rectangular profile; and being able to be flowed over by air and ~~having~~

molded stiffening ~~means~~ elements integrated in the gills, ~~characterized in that the stiffening means are integrated in the gills~~

wherein the profile includes an S-shaped cross section with two rounded portions,

wherein the cross section includes an incident-flow region, a flow-off region, and a deflecting region arranged between the incident-flow region and the flow-off region,

wherein the incident-flow region includes an incident flow-angle, the flow-off region includes a flow-off angle, and the deflecting region includes a deflecting angle,
and

wherein the incident flow-off angle and the flow-off angle each lies in a range of from 0 to 10 degrees and the deflecting angle lies in a range of from 15 degrees to 35 degrees.

2 – 5. (Cancelled).

6. (Currently Amended) The fin as claimed in claim [[3]] 1,

wherein ~~the cross section has an incident-flow region and a flow-off region and a deflecting region arranged between them, the incident-flow region and flow-off region~~

~~respectively having an~~ the incident-flow angle and the flow-off angle (~~α_s, α_z~~) ~~of are~~ approximately the same size, and

~~wherein~~ the deflecting angle ~~region having a deflecting angle (β_s, β_z), in that the~~ deflection angle is greater than the incident-flow angle and the flow-off angle, i.e. $\beta_s > \alpha_s$ and $\beta_z > \alpha_z$.

7. (Cancelled).

8. (Currently Amended) The fin as claimed in claim 1, wherein the incident flow-off angle and the flow-off angle each lies in a range of from 0 to 5 degrees and the deflecting angle lies in a range of from 20 degrees to 30 degrees ~~following ranges apply for the angles α_s and β_s :~~

~~0 — $\alpha_s \leq 5$ degrees, and~~

~~20 — $\beta_s \leq 30$ degrees.~~

9. (Cancelled).

10. (Currently Amended) The fin as claimed in claim ~~[[1]]~~ 12, wherein the incident flow-off angle and the flow-off angle each lies in a range of from 5 to 15 degrees and the deflecting angle lies in a range of from 20 degrees to 30 degrees ~~following ranges apply for the angles α_z and β_z :~~

~~5 — $\alpha_z \leq 15$ degrees, and~~

~~20 — $\beta_z \leq 30$ degrees.~~

11. (Currently Amended) A heat exchanger with header boxes and fluid ducts, ~~such as tubes,~~ wherein tubes are connected to ~~them~~ the header boxes in a fluid-tight manner, the tubes being held in a sealed manner in each case in openings of the header boxes, with an inlet and an outlet, with fins being arranged between the tubes or perpendicularly to the tubes, wherein the fins are ~~designed as claimed in~~ the fins of claim 1.

12. (New) A fin, for a flat tube heat exchanger that is configured to be flowed over by air, arranged between flat tubes of the heat exchanger or perpendicular to the flat tubes of the heat exchanger and connected to the flat tubes of the heat exchanger with a cohesive material joint or mechanically, comprising:

gills including a buckle-proof profile which deviates from a straight line or a rectangular profile;

molded stiffening elements integrated in the gills,

wherein the profile includes a cross section which is bent a plurality of times,

wherein the cross section includes an incident-flow region, a flow-off region, and a deflecting region arranged between the incident-flow region and the flow-off region,

wherein the incident-flow region includes an incident flow-angle, the flow-off region includes a flow-off angle, and the deflecting region includes a deflecting angle, and

wherein the incident flow-off angle and the flow-off angle each lies in a range of from 0 to 25 degrees and the deflecting angle lies in a range of from 15 degrees to 35 degrees.

13. (New) The fin as claimed in claim 12,

wherein the incident-flow angle and the flow-off angle are approximately the same size, and

wherein the deflecting angle is greater than the incident-flow angle and the flow-off angle.

14. (New) The fin as claimed in claim 12, wherein the cross section includes an approximately Z-shaped cross section.

15. (New) A heat exchanger with header boxes and fluid ducts, wherein tubes are connected to the header boxes in a fluid-tight manner, the tubes being held in a sealed manner in each case in openings of the header boxes, with an inlet and an outlet, with fins being arranged between the tubes or perpendicularly to the tubes, wherein the fins are the fins of claim 12.